

KUBOTA CORPORATION

EXECUTIVE ORDER U-R-025-0092

New Off-Road

Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2003	3KBXL.719KCC	0.479, 0.719	Diesel	3000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
	Indirect Diesel Inje	ection	Generator Set, Other Indu	astrial Equipment

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION	EMISSION STANDARD		EXHAUST (g/kw-hr)				OPACITY (%)		
CLASS	CATEGORY		нс	NOx	NMHC+Nox	со	PM	ACCEL	LUG	PEAK
KW < 8	Tier 1	STD	N/A	N/A	10.5	8.0	1.0	20	15	50
8 ≤ KW < 19	Tier 1	STD	N/A	N/A	9.5	6.6	0.80	N/A	N/A	N/A
		CERT	-	-	5.9	3.4	0.47	-	-	-

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 227th day of November 2002.

Allen Lyons, Chief

Mobile Source Operations Division

Raphael Susnour

Attachment 131

Engine Model Sumary Form

Manufacturer: KUBOTA Corporation
Engine category: Nonroad Cl

EPA Engine Family. 3KBXL.719KCC
Mfr Family Name: N/A

Process Code: New Submission

EO #U-R-025-0092

1.Engine Code	2.Engine Model	3.BHP@RPM mm/stroke @ peak (SAE Gross) _{kw} (for diesel only)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	8.Fuel Rate: 9.Emission Control (lbs/hr) @peak torque Device Per SAE J1930
D722-D2-E01	D722-D2-E	20.5@3600 r.3	15.2	9.2	N/A	N/A	N/A	★
D722-D2-E02	D722-D2-E	19.2@3600	14.3	8.6	N/A	N/A	N/A	- NAME - 1781
D722-D2-E03	D722-D2-E	16.6@3000	14.1	7.1	N/A	N/A	N/A	
Z482-D2-E01	Z482-D2-E	12.9@3600	14.7	5.9	N/A	N/A	N/A	**
Z482-D2-E02	Z482-D2-E	12.3@3600	14.2	5.7	N/A	N/A	N/A :	* 3
Z482-D2-E03	Z482-D2-E	9.7@2600 72	14.4	4.2	N/A	N/A	N/A	
Z482-D2-E04	Z482-D2-E	11.1@3000	14.6	4.9	N/A	N/A	N/A	
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